

April 25, 2006

Mr. John Wilson
Mr. Tim Tutt
Mr. Gary Flamm
California Energy Commission
1516 Ninth Street, MS-25
Sacramento, CA 95814-5512

Subject: Title 20 – 15 day language for Metal Halide Luminaires

This letter is submitted to the CEC regarding the proposed Metal Halide luminaire regulations. As you are aware, my company has provided detailed communications on July 15, 2006, October 17, 2005 and March 10, 2006. In addition, we have contributed to the NEMA comments on this topic since May 2004 – including the most recent April 2006 document.

There are two critical issues that require careful consideration before the final adoption of this standard.

(1) Lamp orientation for non-probe start MH luminaires

There is a technical flaw regarding the definition of vertical. The current definition of vertical would cover luminaires (such as floodlights) that are designed to be operated in any orientation since they are rated to operate within 15° of vertical. I do not believe that was the intent of CEC to cover these products in 2006 and it is not technologically feasible. Based on industry data previously provided to CEC, universal lamps are available for 150w. There is one manufacturer with a 320w universal lamp available. There are no universal lamps available for any other wattages. Since vertical base-up regulations went into effect January 1, 2006, the definition of vertical is not currently feasible nor can it be enforced for universal position luminaires, such as floodlights. We request that the CEC clarify the definition to cover products rated “only” for use within 15 degrees of vertical, or specifically exempt floodlights for the 2006 requirements. These products will be covered with the expanded requirements covering all burning positions in 2008.

RECOMMENDATIONS:

- Revise the note for Table N-1 as follows:

Notes: Fixtures are covered if they are capable of operating lamps that fall within the range of included lamp wattages. Vertical includes products rated only for use within 15° of vertical.

(2) Exempted luminaires for MH ballast efficiency requirements

We appreciate the review and modifications that have been made with regard to MH ballast efficiency requirements. However there is a remaining concern regarding exemptions – especially as it relates to outdoor luminaires. It has been previously presented to CEC that various MH ballasts that will not meet the 88% efficiency requirement. These ballasts will have to be redesigned in order

to meet the requirements. This is most prominent for 150w and 175w ballasts used in outdoor luminaires. We noted in July 2005 that the 175w product is a very popular wattage for outdoor luminaires. I understand that CEC has expressed interest in shifting the market to 150w products, however there are some key issues that need to be considered:

- (1) CEC has not conducted any studies on the impact of implementing this change. The ballast efficiency requirements were not been finalized until the end of February 2006. I have not seen any studies justifying why only 150w outdoor products for high ambient conditions should be exempted. Furthermore, there have not been any studies regarding the energy savings or cost justification related to the use of 150w versus 175w outdoor products.
- (2) CEC has not conducted any studies on the availability of products to meet the 2008 requirements. We intend to fully support requirements that have been appropriately justified, but it is unreasonable to expect luminaire manufacturers to shift product availability from 175w to 150w for the full range of products we sell with only 18 months to complete that transition. We will be required to:
 - identify all non-compliant products within the 150-500w range
 - determine from ballast manufacturers what the dimensions and thermal conditions are for redesigned or new ballasts
 - redesign the ballast housing within the luminaire if dimensions of the ballast change
 - conduct new thermal tests
 - obtain UL certification if thermal performance is changed

The timing and cost associated with converting non-compliant 175w products to a compliant alternative is significant and unjustified. We request that CEC either exempt 175w outdoor products or delay the implementation date to January 1, 2009 to allow a reasonable amount of time to convert products. Given the interest in moving Title 20 forward as quickly as possible, we believe that exempting 175w outdoor products will allow California to move forward with energy savings for the other wattage products. It will also allow CEC to conduct appropriate studies to address 175w products at a future date. We reiterate our support for CEC to conduct an independent study as recommended in the NEMA 2/7/06 letter.

RECOMMENDATIONS:

- Revise the exemption 2.a. for MH ballast efficiency in Table N-1 to “rated only for 150 or 175 watt lamps; and”

I hope you will seriously consider the recommendations in this letter. Acuity Brands Lighting is committed to working aggressively to promote energy efficiency in both redesigned products and new technologies. We do not oppose the concept of improved MH luminaire energy efficiency; however it is our opinion that the regulation has not been supported with appropriate technical or market analysis and is more appropriately addressed in Title 24 building standards. We have provided recommendations for revisions that are specific, achievable and aggressive and support the intent of the California Appliance Standards.

I look forward to receiving your response to these issue and welcome the opportunity to provide additional information or clarification.

Best regards,

A handwritten signature in black ink, appearing to read "Cheryl R. English". The signature is fluid and cursive, with the first name "Cheryl" being more prominent.

Cheryl English

Vice President, Engineering Services & Industry Relations

cc: Kyle Pitsor
Fred Carpenter
Mike Minarczyk

Appendix A – Availability of Pulse Start Lamps

Lamp Wattage	Position	GE	OSI	Philips	Venture	NOTES
150	Vertical BU					Universal burn available for Vertical Base Up
	Vertical BD				X	Universal burn available for Vertical Base Down
	Horizontal					Universal burn available for horizontal position
	Universal	X	X	X	X	
175	Vertical BU	X	X	X	X	
	Vertical BD					No vendors available for Vertical Base Down
	Horizontal					No vendors available for Horizontal
	Universal					No vendors for Universal
200	Vertical BU		X		X	Only two vendors for Vertical Base Up
	Vertical BD				X	Only one vendor for Vertical Base Down
	Horizontal				X	Only one vendor for Horizontal
	Universal					No vendors for Universal
250	Vertical BU	X	X	X	X	
	Vertical BD				X	Only one vendor for Vertical Base Down
	Horizontal				X	Only one vendor for Horizontal
	Universal					No vendors for Universal
300	Vertical BU					
	Vertical BD				X	Only one vendor for Vertical Base Down
	Horizontal				X	Only two vendors for Horizontal
	Universal					No vendors for Universal
320	Vertical BU	X	X		X	
	Vertical BD				X	Only two vendors for Vertical BD / Universal
	Horizontal		X		X	
	Universal			X		Only one vendor for Universal
350	Vertical BU	X	X	X	X	
	Vertical BD				X	Only one vendor for Vertical Base Down
	Horizontal				X	Only one vendor for Horizontal
	Universal					No vendors for Universal
400	Vertical BU	X	X	X	X	
	Vertical BD	X	X		X	
	Horizontal			X	X	Only two vendors for Horizontal
	Universal					No vendors for Universal
450	Vertical BU				X	Only one vendor for Vertical Base Up
	Vertical BD				X	Only one vendor for Vertical Base Down
	Horizontal					No vendors for Horizontal
	Universal					No vendors for Universal